

Title (en)  
FOLDING DEVICE WITH LOCKING MEANS

Title (de)  
KLAPPVORRICHTUNG MIT VERRIEGELUNG

Title (fr)  
DISPOSITIF PLIANT AVEC VERROUILLAGE

Publication  
**EP 2736797 A1 20140604 (DE)**

Application  
**EP 12743063 A 20120717**

Priority  
• DE 102011052134 A 20110726  
• DE 2012100216 W 20120717

Abstract (en)  
[origin: WO2013013667A1] The invention relates to a swing-action device with locking means which is intended for a bicycle and has, on one side, a swing-action articulation and, on the other side, a locking mechanism which contains a locking group, which is connected in a rotatable manner to a supporting element (4b) and is braced against a curved clamping surface (5d) of a clamping element (5b) arranged on the opposite side, said clamping surface running eccentrically in relation to the axis of rotation of the locking group. Known swing-action devices of this kind have overly short clamping displacements, require additional central elevations and depressions for positioning the parts and/or are unstable or have low adjustment tolerances in the clamping connection. According to the invention, the extended axis of rotation of the locking group, in the locked state of the swing-action device, is located within the circle described by the radius of curvature of the clamping surface (5d), and this allows a large clamping displacement. An adjusting nut adjusts the pressure to which the clamping surface is subjected in the locked state by the locking group. A straightforward securing means keeps the locking group in the locked state. It is advantageous that the swing-action device can be produced cost-effectively from identical extruded profiles.

IPC 8 full level  
**B62K 15/00** (2006.01); **B62K 19/18** (2006.01); **F16B 7/04** (2006.01)

CPC (source: EP US)  
**B62K 15/006** (2013.01 - EP US); **B62K 19/18** (2013.01 - EP US); **F16C 11/103** (2013.01 - US); **E05D 11/1007** (2013.01 - US); **F16B 7/0426** (2013.01 - EP US); **Y10T 403/32532** (2015.01 - EP US)

Citation (search report)  
See references of WO 2013013667A1

Cited by  
EP2689995A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102011052134 A1 20130131**; **DE 102011052134 B4 20130207**; CN 103702897 A 20140402; CN 103702897 B 20160427; DK 2736797 T3 20150622; EP 2736797 A1 20140604; EP 2736797 B1 20150311; JP 2014525869 A 20141002; JP 5695274 B2 20150401; KR 101641501 B1 20160721; KR 20140040853 A 20140403; US 2014140756 A1 20140522; US 9371108 B2 20160621; WO 2013013667 A1 20130131

DOCDB simple family (application)  
**DE 102011052134 A 20110726**; CN 201280036886 A 20120717; DE 2012100216 W 20120717; DK 12743063 T 20120717; EP 12743063 A 20120717; JP 2014521954 A 20120717; KR 20147003754 A 20120717; US 201214232258 A 20120717